# RESPONSIVENESS SUMMARY CONCERNING EPA'S SEPTEMBER 29, 2000 PUBLIC NOTICE PROPOSING COLIFORMS TMDLs FOR A NUMBER OF WATERS IN THE STATE OF FLORIDA

# Public Participation Activity Conducted:

On September 29, 2000, EPA Region 4 published an abbreviated public notice in the legal advertising section of the Pensacola News Journal. Additionally, Region 4 mailed copies of a detailed public notice to the Florida Department of Environmental Protection (FDEP), the Plaintiffs in the Florida total maximum daily load (TMDL) lawsuit against EPA (Florida Wildlife Federation, et al. v. Carol Browner, et al., No. 98-356-CIV-Stafford), and persons, identified as potentially interested parties, on a mailing list maintained by Region 4. This public notice requested comments from the public on EPA's proposed, coliforms TMDLs for the following water quality limited segments:

WATERBODY	WATERBODY IDENTIFICATION	
BLACKWATER RIVER BASIN		
Blackwater River	MAPID 4	
West Fork	MAPID 42	
East Fork	MAPID 53	
Manning Creek	MAPID 59	
Blackwater River	MAPID 75	
Big Juniper Creek	MAPID 84	
Big Coldwater Creek	MAPID 96	
CHOCT AWHAT CHEE RIVER BASIN		
Bruce Creek	MAPID 11	
Choctawhatchee River	MAPID 14	
Camp Branch	MAPID 21	
Choctawhatchee River	MAPID 24	
Alligator Creek	MAPID 26	

WATERBODY	WATERBODY IDENTIFICATION
Sikes Creek	MAPID 27
Fish Branch	MAPID 28

# Matters on Which Public Was Consulted:

As a result of settlement negotiations in the Florida TMDL lawsuit against EPA (Florida Wildlife Federation, et al. v. Carol Browner, et al., No. 98-356-CIV-Stafford), EPA had the following commitment:

"... if Florida fails to submit to EPA for approval/disapproval any TMDL for a WQLS identified on Florida's 1998 Section 303(d) List according to the schedule attached as Exhibit A hereto, then, in accordance with that schedule and subject to paragraph V.A.2. [of the Consent Decree] below, EPA shall propose such TMDL subject to paragraph V.A.5.b. [of the Consent Decree] below.

In the event EPA proposes TMDLs under paragraph V.A.1. of this Consent Decree, EPA shall propose such TMDLs no later than nine (9) months after the final date for Florida to have submitted such TMDLs to EPA for approval/disapproval."

The public was consulted on proposed, coliforms TMDLs for fourteen water quality limited segments located in the Blackwater and Choctawhatchee River Basins in the State of Florida. EPA Region 4 had received and evaluated water quality-related data and information about these waters and the pollutant and had prepared documents supporting the preliminary determinations of these evaluations.

# Summary of Public's Comments:

A couple of people contacted the EPA Region 4 offices, during the public comment period, to request information. The following is a brief summary of those contacts by the public:

1. Ernest Rivers
Pensacola, Florida
October 4, 2000

requested a copy of each of the proposed TMDLs

# FINAL - March 31, 2001

# 2. Barbara Ruth

Florida Department of Environmental Protection Pensacola, Florida October 31, 2000

indicated that she would like to offer comments and data

# The following persons provided written comments or written request for copies of the proposed TMDL during the public comment period:

# 1. Jan Mandrup-Poulsen

Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 October 27, 2000

## 2. Barbara Ruth

Florida Department of Environmental Protection Northwest District Pensacola, Florida November 1, 2000

# 3. Paul Thorpe

Florida Department of Environmental Protection Northwest District 81 Water Management Drive Havana, Florida 32333 November 1, 2000

# Agency's Specific Responses in Terms of Modifications of the Proposed Action or an Explanation for Rejection of Proposals Made by the Public:

It should be noted that all of the aforementioned requests for information, data, documents, etc., were responded to in a timely manner (typically, within 24 hours of the request).

The following are the specific comments and EPA's responses to each of them:

The TMDL documents should be modified to include an executive summary providing an overview of the findings of these TMDLs.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

A summary page(s) showing the details of the TMDLs has been added.

# **COMMENT**

Recommends that Chapter 6 of the TMDL reports be expanded to provide additional information on how the TMDL value was calculated, how the land use category to be subject to load reductions was selected (when applicable), assess and provide sensitivity analyses, and explain how and when "Reserve for Future Growth/Activities" was included.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This is dealt with in subsequent comments and responses. The additional information has been added in Chapter 6 of each of the 4 TMDL documents.

# **COMMENT**

The general comments concerning the Blackwater River downstream segment are also applicable to the other NWF documents for the Blackwater River six segments and the Choctawhatchee River

Barbara Ruth, Florida Department of Environmental Protection, Northwest District, Pensacola, Florida, November 1, 2000

#### RESPONSE

The appropriate corrections have been made to all four of the Northwest Florida TMDL documents.

"Eden State Gardens" is misspelled throughout the document. "Choctawhatchee Bay" is misspelled on page iii.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Spelling corrections have been made.

# **COMMENT**

The report mistakenly states that Okaloosa County contributes to the Choctawhatchee River watershed. Okaloosa County lies within the watershed contributing to the Choctawhatchee Bay. Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# RESPONSE

The statement has been corrected.

# **COMMENT**

Page 2-5 refers to Bruce Creek which is not shown on any map in the report. The location of the poultry processor in Defuniak Springs should be located on the maps. The date the discharge to surface water ceased should be provided. The commenter does not believe any STPs currently discharge into the Camp Branch Basin.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

- Figures will be updated with the location of Bruce Creek.
- Showell Farms (FL0002453), the poultry processor, was not included in the TMDL development for Bruce Creek and is an inactive facility. The permit expired in 1994 and model calibration was done for 1995, so the discharge from the facility was not taken into account
- Bonifay STP is not discharging to Camp Branch. It will be removed from Sections 4.1 and 6.3. The table in section 6.3 will be replaced with the table below.

Source	Existing Loading Fecal Coliform (counts/30 days)	Estimated Percent Reduction	Allocated Load (counts/30 days)
Nonpoint Sources			

<u> </u>			7.66 E+12
Total Load Reduction = 0.95%		Margin of Safety <sup>1</sup>	3.83 E+11
Total Existing Load	7.35 E+12	Load Allocation	7.28 E+12
Cattle in the Stream	6.17 E+11	9.49%	5.58 E+11
Failing Septic Systems	2.06 E+08	0.00%	2.06 E+08
Wetlands	1.44 E+11	0.00%	1.44 E+11
Urban	2.48 E+10	0.00%	2.48 E+10
Residential	5.93 E+10	0.00%	5.93 E+10
Pasture	5.82 E+12	0.00%	5.82 E+12
Other	0.00 E+00	0.00%	0.00 E+00
Open Land	0.00 E+00	0.00%	0.00 E+00
Forest/Vegetated	5.44 E+11	0.00%	5.44 E+11
Cropland	1.38 E+11	0.00%	1.38 E+11

There are 15 listed segments on Florida's 1998 § 303(d) list for Choctawhatchee Bay and River. All of the eight river segments include coliforms as a reason for impairment. The text on page 2-3 reports otherwise.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The needed correction has been made.

## **COMMENT**

Page 2-5 notes the map identification numbers used by the Department. Which maps use these numbers?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The maps referred to have been referenced.

# **COMMENT**

The channel geometry shown for several streams on page 2-14 [now page 2-8] should note that

the depths and widths are constant with flow. It is important to note with bacteria that the velocity increases with flow. Beach and shellfish closures may need to be made more quickly at higher flow events.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The appropriate note and implication for closures have been added.

# **COMMENT**

Page 3-1 should be updated to cite and use the findings from Florida's 2000 § 305(b) report as the basis for the water quality assessment.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Florida's 2000 § 305(b) report was reviewed for any updates. The material available to EPA did not indicate any change over the 1996 assessment. Reference to this fact is noted in the TMDL.

# **COMMENT**

The report should note the number of permitted domestic and industrial wastewater facilities in Florida as well as the current number for Alabama. Refer to page 3-1.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

Based on EPA's PCS database, there are currently 8 active permitted domestic and industrial wastewater facilities in the Florida portion of the Choctawhatchee River watershed. The number of Alabama facilities is already mentioned in the report.

#### **COMMENT**

There are no permitted CSOs in Florida.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This has been noted.

#### **COMMENT**

Page 3-8 notes that the City of Bonifay upgraded the discharge. When did this occur? The

report implies the discharge is land applied, but the TMDL report lists the facility as a 1.4 MGD permitted discharge.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

The revised TMDL report now only references the 1.4 MGD discharge from Bonifay.

# **COMMENT**

Table 3-4 should be updated to reflect that only Bonifay and Chipley have permitted surface water discharges.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Table 3-4 has been eliminated.

# **COMMENT**

Are the axes labeled correctly on Figure 3-3, or are they reversed?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Figure 3-3 has been eliminated.

# **COMMENT**

Are the units for fecal coliform, given alternatively as cfu/100 ml and counts (#/100 mL), equivalent?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

They are equivalent and this has been noted.

# **COMMENT**

Page 4-5 notes that it would be useful to have information on poultry houses, feedlots, chickens, hogs, etc., but no attempt seems to have been made to obtain these data. Please explain.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Data on hogs and chickens has been added

# **COMMENT**

The two TMDL reports should be combined. The existence of two reports will likely cause confusion.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

Each report now references the other at the very beginning to minimize this confusion.

# **COMMENT**

EPA and Tetra Tech has prepared TMDLs for seven of eight § 303(d) listed segments.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This is correct and an explanation has been included. The downstream segment is an esturaine segment is is scheduled for a later TMDL development.

The section numbering in Chapter 6.0 is not sequential and does not match the Table of Contents. The numbering does match the format used in the Table of Contents of the TMDL report for Choctawhatchee River (2 segments) and Sikes Creek.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The discrepancy has been corrected.

# **COMMENT**

The final paragraph of page 1-2 is a repeat of the previous one.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The repeated text has been deleted.

## **COMMENT**

References to Okaloosa County should be removed from the box on page 2-1, the text on page 2-10, and on page 3-1.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Done.

## **COMMENT**

The lead-in text for Florida's fecal coliform standard should be above the box (on page 2-11) containing the standard, not below it.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This correction has been made.

## **COMMENT**

On page 2-3, the Division of Forestry should be identified as part of the Florida Department of Agriculture and Consumer Services. The text erroneously cites 18 impaired and 1998 § 303(d) listed segments in the Choctawhatchee River watershed. Page 2-8 also contains an erroneous cite of the number of impaired and 1998 § 303(d) listed segments in the Choctawhatchee River

watershed.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The appropriate identification and corrections have been made.

# **COMMENT**

On page 2-14, the correct name of the game and fish commission is the Florida Fish and Wildlife Conservation Commission.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Page 2-14 has been corrected.

# **COMMENT**

Page 3-5 should indicate that the table represents fecal coliform data.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Done.

## **COMMENT**

"Eden State Park" is misspelled in the header of Table 2-1 and in the listing of all tables.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Correction made.

## **COMMENT**

It is difficult to believe that there are no horses in any of the basins listed on pages 4-12 to 4-15. If no information is available, perhaps this column should be deleted.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This is a lack of information and the column has been deleted.

Section 4.1 text refers to three facilities listed in Table 4-1, but there are only two.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The text has been corrected.

# **COMMENT**

Page 4-2 text refers to five permit violations, but only four from the Chipley Water and Sewer System are shown in Table 4-2.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The text has been clarified.

# **COMMENT**

The title for figure 4-4 should be "Fish Branch."

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The title has been corrected.

# **COMMENT**

The equation on page 4-12 in section 4.2.1. should be modified to use a "plus" sign where the "minus" sign is shown.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Correction made.

# **COMMENT**

"Lambs" is misspelled in Table 4-3.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The misspelling is corrected.

On page 4-16 onward, why is the number of failing septic systems given as a fraction for each subwatershed? The text throughout the report implies that Tables 4-7 through 4-10 contain numbers of failing septic systems.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This has been clarified by referencing the explanatory text in each table.

# **COMMENT**

Figure 4-5 was not included in the version of the TMDL provided to the commenter.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Figure 4-5 is included in the final.

# **COMMENT**

On page 5-3, reference is made to USGS gage 02370000. This gage is located in the Blackwater River watershed.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The flow gage used for calibration is located in the Blackwater watershed. There are three USGS flow gages in the Choctawhatchee River watershed with significant amounts of historical data. These stations are on the main stem of the Choctawhatchee River and represent relatively large drainage areas. For hydrology calibration purposes, a gage representing a smaller drainage area (more comparable in size to the listed streams' watersheds) was selected. Although it is located in the Blackwater watershed, this gage represents an area with similar hydrologic conditions to those in the smaller impaired Choctawhatchee watersheds.

#### **COMMENT**

Why was the Blackman, Florida weather station used as the source for meteorological data, rather than the Wausau, Florida station?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The Wausau, Florida station was in fact used. Blackman was originally used, but was not updated in the report. Blackman will be changed to Wausau in the text.

# **COMMENT**

Figure 5-2 was not included in the version of the TMDL provided to the commenter.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The figure is included in the final TMDL.

# **COMMENT**

Chapter 6 was confusing. No opening explanatory text is provided giving the basis for the total loading capacities.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Appropriate explanatory and lead-in text has been added.

#### **COMMENT**

In three of the four TMDL cases, the "Annual Existing Loading Fecal Coliform" is equal to the "Annual Allocated Load," as adjusted using the Estimated Percent Reduction. The numbers for Bruce Creek do not match up this way.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

In the Bruce Creek watershed there was significant capacity remaining that was designated "Reserve for Future Growth/Activities."

# **COMMENT**

If the values reported for Bruce Creek are correct, text should be provided to indicate that Bruce Creek's current load falls below its assigned load allocation, allowing for the allocation of a "Reserve to Future Growth/Activities."

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

This is so indicated in footnote 2 for the table in Section 6.2.

# **COMMENT**

What was the rationale for assigning most of the load reduction to the 'Cattle in the Stream' category (Chapter 6)?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The rationale has been added.

## **COMMENT**

Was a "Source Sensitivity Analysis" assessment performed for these waters as was done for the Blackwater River TMDLs? If so, this information should be included in the report.

Jan Mandrup Poulson, Florida Department of Environmental Protection, Twin Towers Office Ruilding, 2600 Blair Stone

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

A formal Source Sensitivity Analysis was not done for the Choctawhatchee River watershed. We would expect results of a sensitivity analysis to be similar to those for the Blackwater TMDL.

## **COMMENT**

References to Okaloosa County should be removed from the box on page 2-1, the text on page 2-

9, and the text on page 3-1.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Corrections have been made.

# **COMMENT**

The lead-in text for Florida's fecal coliform standard on page 2-10 should be above the box containing the standard and not below it.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Done.

# **COMMENT**

On page 2-13, the correct name of the game and fish commission is the Florida Fish and Wildlife Conservation Commission.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

Corrected.

# **COMMENT**

"Eden State Park" is misspelled in the header for Table 2-1 and in the listing of all tables.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

This is corrected.

#### **COMMENT**

Sikes Creek on page 3-2 has no violations for bacteria. Perhaps it should be taken off the list for this parameter.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

RESP	ONSE
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Table 3-1 on page 3-2 only lists violations of the 800/100 mL instantaneous fecal

coliform standard. The footnote following the table states, "Sufficient data were not available to compare to the geometric mean standard of 200/100 mL." The model, however, was able to develop sufficient output data to base the TMDL on the 200/100 mL standard. In any event, the Florida 1998 303(d) list was the basis for listing Sikes Creek as impaired, not Table 3-1.

# **COMMENT**

The equation of page 4-7, section 4.2.1, should be modified to use "plus" signs where the "minus" signs are shown.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Corrected.

#### **COMMENT**

Note that on page 4-7, a summary of hog density is given for all basins in this report.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Noted. Data on hogs has been added to all the TMDL reports.

# **COMMENT**

The discussion of critical conditions for modeling on page 4-12 is an important policy issue. The State has historically used low flow conditions to represent the WLA for point sources. Yet, many point sources still experience problems with infiltration/inflow and hydraulic overload, which impact their ability to chlorinate or disinfect their waste. The final sentence in the second paragraph should be clarified to indicate it refers only to pollution controls for point source discharges.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The clarification has been made.

#### **COMMENT**

Table 5-2 on page 5-7 gives fecal coliform production rates for horses (which are not in the livestock inventory in Chapter 4) and does not give the rate for hogs (which are in the inventory).

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The rate for hogs has been added and that for horses deleted.

# **COMMENT**

In all three cases, the "Annual Existing Loading Fecal Coliform (counts/year)" is equal to the "Annual Allocated Load" for all the listed land uses. Furthermore, the Annual Existing Loading in all three cases is exactly equal to the TMDL. The commenter finds this to be highly unlikely. Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The counts/year have been recalculated as counts/day. The TMDL would have included a percent reduction if a reduction would have been needed to achieve water quality standards. In this case the existing loading will allow standards to be met, with little if any margin within the limits of calculation. Therefore, the TMDL was set equal to the existing loading.

# **COMMENT**

It is not clear why only in the case of Sikes Creek was an insignificant amount of loading set aside as a reserve for future growth/activities.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The TMDLs have been revised so they all, in this report, have a reserve for future growth/activities.

# **COMMENT**

There appears to be an error in the grazing livestock interpolation formula. On page 4-8, the formula for averaging cattle numbers between two counties is incorrectly listed as "294.92\*[(.371-.313)/2)]." Alternatively, the formula used in the proposed Blackwater River TMDL which calculates the average in the portion within each county separately, may be more straightforward.

Paul Thorpe, Florida Department of Environmental Protection, Northwest District, 81 Water Management Drive, Havana, Florida 32333, November 1, 2000

#### <u>RESPONSE</u>

The calculation has been revised to simply sum the number of cattle in each county in the subwatershed.

Page 2-3 of the proposed TMDL cites our SWIM plan in identifying fishing, hunting, scuba diving, hiking, and canoeing as mainstays of the region's tourist economy. Scuba diving and hiking probably don't register highly in the region's overall economy and it is suggested that these activities could be noted as "popular."

Paul Thorpe, Florida Department of Environmental Protection, Northwest District, 81 Water Management Drive, Havana, Florida 32333, November 1, 2000

# **RESPONSE**

So noted in the text.

# **COMMENT**

On page 2-3, reference is made to possible coliform input by canoeists on Big Juniper Creek and other creeks. What source of data was used to quantify these impacts?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This would be an insignificant source and the reference is removed.

# **COMMENT**

Page 3-5 shows 64 samples for Pond Creek at Hwy 90 near Milton with only one violation of the water quality standards for total coliform, but with a max value of 46,000. Please check the database to see if more violations occurred.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

This has been corrected. The max value was 4300, with 7 violations.

# **COMMENT**

Page 3-7 notes that a more comprehensive source of point source data is needed. What specifically is needed that is not in the PCS database - daily values instead of monthly? The need for more frequent sampling is also noted on page 4-3.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

CONCERNING THE WATERSHED CHARACTERIZATION AND TMDL APPROACH FOR THE BLACKWATER RIVER WATERSHED-BIG COLDWATER CREEK, BIG JUNIPER CREEK, BLACKWATER RIVER, EAST FORK BIG COLDWATER CREEK, MANNING CREEK, AND WEST FORK BIG COLDWATER CREEK

The document has been revised and this comment removed.

# **COMMENT**

Page 2-3 shows a map with Panther Creek at two different spots. Please correct.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

According to BASINS Reach File, Version 1, and USGS topo maps, there are two Panther Creeks. One is in Florida and one is in Alabama.

# **COMMENT**

A check of the individual land use acreage in Table 2-3 for Big Coldwater Creek results in a total acreage of 151,724.16 acres versus the reported value of 152,616.27 acres. Similarly, Big Juniper Creek's total acreage is 90,547.99 versus the table's reported sum of 91,039.56 acres. Other sums are similarly incorrect. Please check the remaining values in this and other tables for accuracy.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The Total Land Use calculations in Table 2-3 and Table 2-2 in the Blackwater-6 and Choctawhatchee-3 reports, respectively, included the area of "water" in the watershed although it was not listed. This area has now been subtracted from the total and the numbers are corrected.

#### **COMMENT**

Page 4-1 notes that no point sources were identified in the watersheds. However, Whiting Field was a discharger until recently. If historical STORET data and flow data are used, then point sources discharging during that period should be included in the calibration.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

No minor point source facilities were included in the modeling for the TMDLs, due to the

scale of the analysis, the types of facilities, the assumption that they have minimal impact on the waterbodies, and the general lack of characteristic data for these facilities. Whiting Field is a Minor facility and was therefore not included.

# **COMMENT**

Page 4-1 notes that other sources of nonpoint coliform bacteria include: land application of animal wastes, runoff from concentrated animal operations, etc. However, none of the reports include these types of inputs.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This is a generic discussion on page 4-1 and does not imply that these inputs occur here.

# **COMMENT**

On page 4-16, there is a reference to plots of flow and water quality at station 02370000. Where are these plots?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

The flow is plotted in Figure 5-2 to illustrate the hydrologic calibration of the model. The plots of flow and water quality are not included because, as stated in the text, "this is a crude comparison using the best available data."

# **COMMENT**

On page 5-2, how were reach characteristics for RF3 reaches estimated from RF1 data? Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

An explanation of the procedure has been added.

## **COMMENT**

On page 5-3, why is there no mention (in the discussion of rainfall gages) of the Thiessen

polygon technique to estimate rain in the basin?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This is a discussion of the limited availability of rainfall data and the reason for using the water year of October 1, 1978 to September 30, 1979, rather than of the extrapolation techniques that can be used. See the last sentence on page 5-3 for a discussion of the reason for not using stations outside the watershed.

## **COMMENT**

Please correct the formula on page 5-5 as it does not match up with the terms in the related text. Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The formula has been corrected.

#### **COMMENT**

On page 5-7, what are the units on Table 5-1?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Units of cfs are now noted in the table title.

## **COMMENT**

On page 5-8, why are no estimates available for pigs and chickens?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The estimates for Hogs and Chickens have been added to each of the four reports. They were not originally included in the reports because it was assumed that there were not many hog or chicken farms in the watersheds based on personal communication with NRCS. Therefore, they were not considered to be significant sources of fecal coliform

bacteria to the waterbodies. Also the counties of Escambia, Covington, Jackson, and Walton did not have Ag Census data for chickens, so the watersheds in those respective counties do not have livestock counts for chickens.

# **COMMENT**

On page 5-6, Table 5-2, why are no estimates available for pigs and chickens?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Data on hogs and chickens have been added to all 4 TMDL reports.

## **COMMENT**

The newer versions of the TMDL documents were unzipped from Wordperfect files which did not reproduce the figures and maps. This will add some uncertainty to the comments provided. Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Detailed cross-checking of the comments; page, table, & figure numbers has been done to avoid missing any significant comments.

## **COMMENT**

The text of the introduction is confusing in that it discusses seven segments listed as impaired and then lists six waterbodies for which TMDLs will be done. There are actually eight segments in the Blackwater River watershed listed for coliforms, but only seven were to be examined in this study. Two of the listed segments included in the study are for parts of the Blackwater River proper. A third listed segment of the Blackwater River was not studied due to estuarine influences.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This has been rewritten.

# **COMMENT**

The text in section 2.1.1. refers to this report studying six segments of the Blackwater River and its tributaries.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

This is correct and the title is now consistent with this statement.

# **COMMENT**

Table 2-2 incorrectly reports the rainfall values for Pensacola and Crestview. Rather than listing the 30-year rainfall normals, the data shown are the 1996 monthly totals. Please correct this using the information at the website provided as the reference source.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

The incorrect portion of the table has been updated.

## **COMMENT**

The lead-in text for Florida's fecal coliform standard on page 2-13 should be above the box containing the standard and not below it.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### RESPONSE

Correction made.

## **COMMENT**

On page 2-15, the name of the game and fish commission should be updated to Florida Fish and Wildlife Conservation Commission.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Correction made.

Figure 3.1 should be adjusted to remove the station on Mare Creek. The accompanying text correctly states that there are ten water quality stations located within the listed segments.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Figure 3.1 has been replaced.

# **COMMENT**

On page 4-1, reference is made to disposal of poultry litter and feedlots, but no quantification was performed for any watershed. Since best management practices are site specific, there should be a more detailed description of these sources including sludge disposal.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

This is a very general discussion of potential sources of coliform bacteria rather than a quantitative evaluation.

# **COMMENT**

Page 4-1 states "Raw sewage typically has a total coliform count of 10<sup>7</sup> to 10<sup>9</sup> MPN/100 mL and 10<sup>6</sup> to 10<sup>7</sup> fecal coliform counts/100 mL (Novotny and Olem, 1994), along with significant concentrations of fecal coliform bacteria, viruses ..." This statement is confusing and it differs from the source and the range of values used for fecal coliforms in the Choctawhatchee River TMDL report.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

The text has been corrected.

# **COMMENT**

Page 4-19 notes that it is difficult to evaluate critical conditions since many sites did not have flow data. It is possible to utilize a larger fraction of the STORET data by using flow correlation

at many sites in these watersheds. Why wasn't this done, considering most of the streams have perennial flows?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

As is often the case, there are a variety of ways to make evaluations. The evaluation of flows and coliform concentrations discussed bottom of page 4-18 and top of 4-19 indicated that higher concentrations did occur during higher flows. The selection of 1994 as the most representative of worst conditions was the primary means of ensuring that critical conditions were included in the allocation scenarios.

# **COMMENT**

Page 5-2 notes that DEP provided GIS subwatersheds. Please provide a more specific reference in the bibliography.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Source: Knecht, Greg. 1999. Personal Communication. Florida Department of Environmental Protection, Water Quality assessment Section.

## **COMMENT**

In the description of the pollution sources on page 5-9, the report notes coliform die off during transport over soil (and also water). What die off coefficients were used in the model?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Two different decay rates were used to represent bacteria decay/die-off in the model. A constant decay rate of 1.152 (1/day) was used to represent die-off in the streams. Land surface fecal coliform die-off was not explicitly set in the model, however, it was used indirectly to estimate maximum surface storage limits. A decay rate of 0.36 (1/day) was used in estimating the maximum surface storage limits throughout the year.

The land use summary table on page A-1 was used to convert many of the land use types to a limited number of loading types, since the literature does not have loading rates for all categories. There is, however, no listing for solid waste facilities. These produce bacteria from decomposing diapers as well as birds that congregate at landfills. There also is no listing for concentrated animal feeding operations. The low, medium, and high density residential are all lumped into the same category. However, there is generally a much higher density of pet feces per acre around apartments than in low density residential.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

EPA agrees. The correlation of loading to land use can always be refined further. EPA believes, however, that the level of detail used in this TMDL is appropriate to the needed output.

# **COMMENT**

On page 5-14, the numbering of the individual scenarios evaluated is not consistent with that reported in Table 5-3.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

This is now correct.

# **COMMENT**

Section 5.3.6. is very useful. However, the numbering used on page 5-14 does not match that in Table 5-3. Also, this section does not appear in the Table of Contents.

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Appropriate corrections have been made.

# **COMMENT**

The Assessment of Water Quality Conditions section indicates coliform standards were violated 67% of the time (2 of 3 samples) with a median value of 2800 counts and a maximum of 75,000 counts (per 100 mL) in Manning Creek. What is the rationale that allows the TMDL to require no reductions and allows a reserve for growth and future activities ten times the current load? Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

# **RESPONSE**

Note that the entries for Manning Creek in Table 3-2 are based only on 3 reported samples. The TMDL is based on modeling results that suggest these 3 samples are not representative. Moreover, the reserve for growth and future activities has been revised to less than one tenth of the current loading.

# **COMMENT**

On page 5-1, section 5.3.1, the text mistakenly refers to the Choctawhatchee River watershed. Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

#### **RESPONSE**

Correction made.

#### **COMMENT**

In the model setup section on page 5-2, several equations are used to represent the river depth and river width as a function of the upstream drainage area. While these types of empirical equations have been used in the past, they have usually been a function of the flow, which changes on a daily basis. How can the model function properly when river parameters are kept constant for all flow events?

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

The answer is that river parameters were not kept constant for all flow events. The last sentence is Section 5.3.2 states that some reach characteristics were adjusted to result in appropriate flow output and model response.

# **COMMENT**

The reference to Rosgen (1996) is not given in the Reference section.

CONCERNING THE TMDL DOCUMENT FOR THE BLACKWATER RIVER DOWNSTREAM SEGMENT

Jan Mandrup-Poulsen, Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, October 27, 2000

## **RESPONSE**

Reference is added.

# **COMMENT**

In Section 3.1.1., the third sentence of the second paragraph indicates that the data used included that collected since 1980, but did not provide an end date. It appears, from the appendices, that the latest data is from January 1998. A cut-off date needs to be provided in the text so it is clear what range of data was evaluated.

The NWD has been conducting weekly monitoring since 1997/1998 at some of the monitoring stations that were analyzed. There may be a larger/more inclusive data set if more recent data were included. The commenter provided data sheets downloaded from STORET.

Barbara Ruth, Florida Department of Environmental Protection, Northwest District, Pensacola, Florida, November 1, 2000

# **RESPONSE**

The data range in time is added to the textual discussion. EPA appreciates the potential of recent data to achieve more accurate and definitive results from the modeling efforts. It is not clear why these data were not located at the beginning of the modeling work, but – given the nature of these TMDLs and land use in the basins – it is not anticipated that the TMDLs would be significantly changed with these data. However, any revisions of these TMDLs or any reruns of the model will definitely use the most recent data available. We appreciate the data provided by the commenter.

## **COMMENT**

In Table 3-1, a footnote explains that some data were excluded from statistical analysis because too many colonies were present to count, and the value reported is the filtration value. This type of result would indicate a minimum of 6000 CFU's/100 ml were present and should be represented by some numeric value indicative of the pollution loading at that time. The commenter does not believe that these values should be excluded from the dataset in that they

CONCERNING THE FECAL COLIFORM TMDL APPROACH FOR THE BLACKWATER RIVER–DOWNSTREAM SEGMENT

represent a value exceeding water quality standards.

Barbara Ruth, Florida Department of Environmental Protection, Northwest District, Pensacola, Florida, November 1, 2000

# **RESPONSE**

EPA agrees that these data could not be ignored if they would have significant impact. Note, however, that this footnote is only for data from Pond Creek where only the volume that was filtered is reported. Extrapolating from volume to actual counts would take a significant amount of time and would not be expected to have a significant impact on the final results.

# **COMMENT**

The general comments are also applicable to the other NWF documents for the Blackwater River six segments and the Choctawhatchee River.

Barbara Ruth, Florida Department of Environmental Protection, Northwest District, Pensacola, Florida, November 1, 2000

# **RESPONSE**

EPA agrees and these general comments have been been addressed in all four of the Northwest Florida TMDL documents.

# <u>Description of the Effectiveness of the Public Participation Program:</u>

The public participation process in the matter of EPA's establishment of total maximum daily loads for pollutants and waters in the State of Florida was considered to be an important one. The number of comments received from the public was insignificant. In fact, the only comments received were from the State environmental agency. However, this does not demonstrate that the opportunity for public participation in this matter was ineffective.